

What makes Patients Satisfied with their Healthcare? Nationwide Patient Experience Surveys in Japan

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Abstract

Introduction: Patient Experience is stressed more in the context of patient safety and patient-centered care. It is a crucial component in quality evaluation of healthcare. In Japan, Patient Experience Survey (PES) has been conducted at the national level in three-year intervals since 1996. We overviewed general satisfaction of patients in time-series and examined the factors associated with.

Methods: Open source data of PES from 1996 to 2011 were used to find time-series change in general patient satisfaction. For cross-sectional analysis, we examined the factors influencing patient satisfaction by using original PES data of 2005. Cronbach's alpha was calculated for examining reliability of seven questions about patient satisfaction. Logistic regression analysis adjusted for age and sex was used for examining the associations with patient satisfaction and other factors.

Results: Overall rates of showing general satisfaction (extremely satisfied and satisfied) were gradually increased from 53.7% to 64.7% among inpatients, but less increase among outpatients from 48.1% to 50.4%. Seven questions on patient satisfaction in the questionnaire for both inpatients and outpatients, high reliability were confirmed with Cronbach's alphas 0.895 and 0.863, respectively. The highest average score was found in satisfaction with care provided by nurse. Patients' general satisfaction was highly related with satisfaction in good communication with physician (Pearson's correlation coefficient; $r=0.650$, $p<0.01$). Among outpatients, satisfaction with the cost which patients paid on the day they visited had smaller correlation coefficients compared with other satisfaction variables ($r=0.255-0.294$). Respecting autonomy (patients decision was respected on treatment) had positive association with patient satisfaction ($\beta=0.152$, $SE=0.031$, $p<0.001$) and uncertainty of patient safety had negative association with patient satisfaction ($\beta=-1.512$, $SE=0.052$, $p<0.001$).

Conclusion: General satisfaction among patients has been stable or slightly improved over 15 years. Good communication with physician, respecting autonomy and patient safety should be recognized again to improve patient satisfaction.

Introduction

Patient Experience is stressed more in the context of patient safety and patient-centered care in these days. Evaluating patient experiences in healthcare has been focused as Health Care Quality Indicators in OECD Health Project and Patient Responsiveness Survey by WHO [1,2]. Patient experience is taken as a crucial component in quality evaluation [3].

In Japan, Patient Experience Survey has been conducted at the national level in three-year intervals since 1996 as part of the Statistical Survey by Ministry of Health, Labour and Welfare (MHLW) [4], with dynamic change of therapeutic objectives due to rapid population aging as a background. Patient Experience Survey is also performed constantly in other country, such as UK providing national health services [5]. It is always difficult task for public hospitals and healthcare facilities to provide the best quality care under national health insurance with limited human and financial resources. However, it is true that improvement in treatment and care are driven by continuous efforts to meet patients need and satisfaction. In this study, we overviewed general satisfaction of patients by using the data

of national PES in time-series and examined the factors associated with.

Methods

We deployed open source data of National Patient Experience Survey (PES) from 1996 to 2011 to find time-series change in general patient satisfaction. For cross-sectional analysis, we used micro data of PES data of 2005 obtained from Statistics and Information Department MHLW. Official permission to use the micro data was obtained pursuant to the Statistics Act.

Patient experience (patient behavior) survey

This survey started since 1996 with three years interval based on Statistics Act in Japan in the context of demographic aging and dynamic change of disease structure in society. The purpose of this survey is therefore, to reveal patient experiences and satisfaction with their own healthcare system. The subjects of this study were those inpatients and outpatients on the certain day (one day) of October at randomly selected 500 hospitals in nationwide. Those patients who

were provided home visit or home care were excluded. The trained investigator administered the questionnaires to the patients and retrieved them in sealed envelopes at the hospital. The other questionnaires were also retrieved later by mail directly sent to MHLW. Those patients who were not able to fill in the questionnaire by themselves, for example children or senior persons, their family were allowed to help filling in.

Patient satisfaction was asked in seven questions, such as about general satisfaction, satisfaction with treatment/medication, satisfaction with communication with physician, satisfaction with keeping privacy (inpatients only), satisfaction with care provided by nurse (inpatients only), amenity of the room (bed room, bath room, toilet, etc.; inpatients only), and meals (inpatients only), satisfaction with waiting time (outpatients only), the amount of time spent with physician (outpatients only) and the cost which patients paid on that day (outpatients only).

In the questionnaire of 2005, the questions for respecting autonomy (decision-making on treatment was respected or not) and patient safety (if they felt uncertainty on patient safety) were added and those questions were included in the analysis.

Data analysis

Of the 172,809 participants (valid response rate 79.1% of 218,393 recruited into the study), those who were confirmed by Patient Survey (inpatients n=21,070, outpatients n=35,328) were used for cross-sectional analysis on patient satisfaction. Patient satisfaction was

scaled five-grades, such as 5: extremely satisfied, 4: satisfied, 3: average, 2: unsatisfied, 1: extremely unsatisfied. Cronbach’s alpha was calculated as a psychometric test for examining reliability of seven questions about patient satisfaction for inpatients and outpatients respectively. Logistic regression analysis adjusted for age and sex was used for examining the associations with patient satisfaction and other factors, such as respecting autonomy and patient safety. Statistic software of Windows SPSS 17.0 and STAT 10.0 were used for analysis.

Results

Overall rates of showing general satisfaction (extremely satisfied and satisfied) among inpatients were gradually increased from 1996 to 2011 up to 64.7%, but less increase among outpatients from 48.1% to 50.4% (Figure 1). Seven questions on patient satisfaction in the questionnaire for both inpatients and outpatients, high reliability was confirmed with Cronbach’s alphas 0.895 and 0.863 respectively (Table1&2). Between general satisfaction and specific questions for inpatients, the highest Pearson’s correlation coefficient was found in satisfaction with a communication with a doctor r=0.650, p<0.01. For both inpatients and outpatients, satisfaction with treatment/ medication was most strongly related with satisfaction with a communication with a doctor. Among inpatients, satisfaction with keeping privacy was strongly related with satisfaction with amenity of the roomr=0.650, p<0.01. Among outpatients, satisfaction with the cost which patients paid on that day had smaller correlation coefficients compared with other satisfaction variables (r=0.255-0.294).

	general satisfaction	Meal	Amenity	Privacy	Nursing Care	Communication with a doctor
Medical Treatment	0.581**	0.384**	0.437**	0.510**	0.597**	0.694**
Communication with a doctor	0.650**	0.431**	0.472**	0.529**	0.610**	-
Nursing Care	0.607**	0.416**	0.492**	0.566**	-	-
Privacy	0.595**	0.495**	0.492**	-	-	-
Amenity	0.608**	0.572**	-	-	-	-
Meal	0.584**	-	-	-	-	-

Table 1: Correlations between inpatient satisfactions with each variable, Cronbach’s α 0.895 (** p<0.001, Pearson's correlation coefficient)

	General satisfaction	Cost	Privacy	Time spent with a doctor	Communication with a doctor	Medical Treatment
Waiting Time	0.429**	0.284**	0.348**	0.402**	0.351**	0.404**
Medical Treatment	0.666**	0.272**	0.572**	0.694**	0.761**	-
Communication with a doctor	0.650**	0.255**	0.582**	0.772**	-	-
Time spent with a doctor	0.621**	0.270**	0.615**	-	-	-
Privacy	0.633**	0.265**	-	-	-	-
Cost	0.294**	-	-	-	-	-

Table 2: Correlations between outpatient satisfactions with each variable, Cronbach’s α0.863 (**p<0.001, Pearson's correlation coefficient)

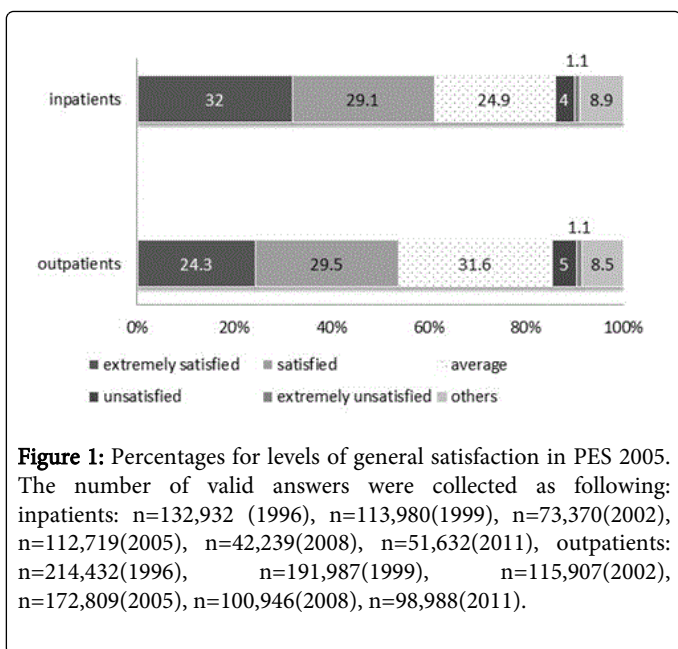


Figure 1: Percentages for levels of general satisfaction in PES 2005. The number of valid answers were collected as following: inpatients: n=132,932 (1996), n=113,980(1999), n=73,370(2002), n=112,719(2005), n=42,239(2008), n=51,632(2011), outpatients: n=214,432(1996), n=191,987(1999), n=115,907(2002), n=172,809(2005), n=100,946(2008), n=98,988(2011).

Figure 2 shows the average satisfaction scores on specific questions for inpatients according to age. The highest scores were found in care provided by nurse for almost all age categories. There was a tendency that the scores of each question were higher among aged over 50 years especially in keeping privacy, amenity and meals.

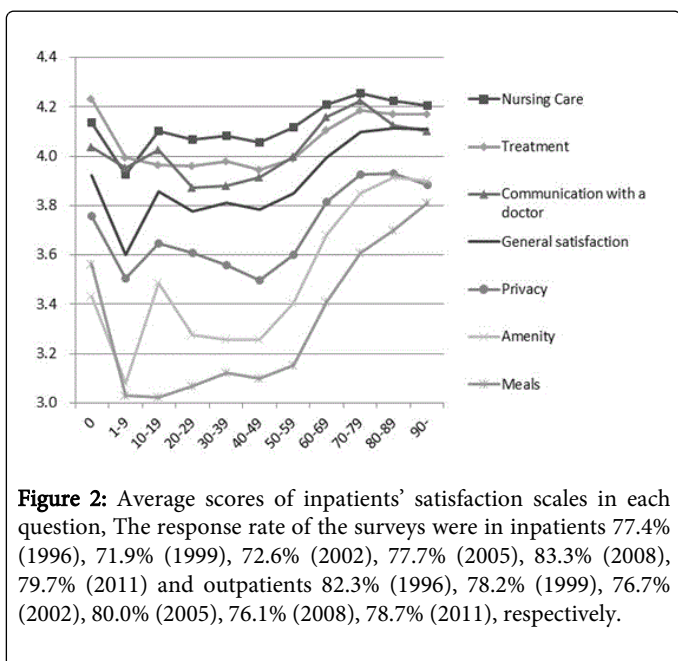


Figure 2: Average scores of inpatients' satisfaction scales in each question, The response rate of the surveys were in inpatients 77.4% (1996), 71.9% (1999), 72.6% (2002), 77.7% (2005), 83.3% (2008), 79.7% (2011) and outpatients 82.3% (1996), 78.2% (1999), 76.7% (2002), 80.0% (2005), 76.1% (2008), 78.7% (2011), respectively.

In logistic regression analysis with patient satisfaction (extremely satisfied) as the dependent variable adjusted by age and sex, respecting autonomy (patients decision was respected on treatment (adult patient only)) had positive association with high patient satisfaction ($\beta=0.152$, $SE=0.031$, $p<0.001$). On the contrary, uncertainty of patient safety was negatively associated with patient satisfaction ($\beta=-1.512$, $SE=0.052$, $p<0.001$).

Discussion

The reports on quality assessments of healthcare from users' perspective have been increasing in recent years. Patients' assessment of healthcare consists of what patients find important and what they have experienced [6]. The combination of patients' instrumental values (what people see as desired features of healthcare) and patients' experiences constitute quality judgments which provides insight on the extent to which healthcare providers meet these values [7,8]. In this study, every satisfaction question was scored higher in older ages. This might be due to patients' instrumental values changed over several decades after dramatic economic changes in society. In results, the highest scores were found in care provided by nurse for almost all age categories. There is a report that there was a stronger perception of how a nursing practitioner differed from a physician [9]. So, it should be paid more attention for the role of nurse, not only in providing care but also in supporting patients on the course of treatment. With regard to communication with physician and patient satisfaction, significant improvement occurred in perceived communication or partnership and health promotion by interventions of training physician [10].

Respecting autonomy and informed consent are ethical and legal issues, but the decision making is sometimes left to physicians in specific situations. In this study, patient satisfaction was positively related with the fact that patients view has been heard by physician. Study in Japan shows that there were few patients who wished to make their own decisions when they were hospitalized or illness became worse. However, the majority of patients desired to collaborate with the doctor in making treatment decisions according to the results [11]. Therefore, physicians should be aware that decision making preference depends on individual.

In a systematic review, it is indicated that promoting patient-centred care within clinical consultations are effective, however, the effects on patient satisfaction, health behaviour and health status are mixed [12]. In our study, further analysis was conducted to examine the associations between patient satisfaction and classification of 58 diseases using multiple logistic regression analysis in a stepwise model. We found positive association with malignant neoplasms and negative association with diabetes mellitus with statistical significance. However, interpretation of this disease-associated satisfaction needed careful consideration because of the limitation of data, which lacks patients' health status, severity of the disease, and type of provided treatment.

There is a global movement focusing on quality assessment from the perspective of people/patients. In EU, a cross-sectional survey was conducted to assessing the patient-perceived improvement potential of primary care in 34 countries [8]. In Asia/pacific countries, of 26 countries that responded to relevant section of the evaluating quality strategies in Asia/pacific survey, 16 have developed systems to measure patient experience [13]. There is an increasing concern about the quality of healthcare even in the developing countries, which suffers fragile or poor healthcare system with often observed disparity of care quality. It was reported that higher quality of care was modestly associated with a better patient experience, but additional research is needed to ensure that national policy efforts are not working at cross purposes and there need not be a trade-off between delivering high quality of care and patient satisfaction [14].

Study Limitations

The limitation of this study is that we lack the data of patients' instrumental value. Satisfaction studies by disease should also be considered as disease-specific elements. More detailed analysis including hospital function and bed scale (not used in this analysis), distinctions between first and follow-up visits (not conducted in original PES study).

Conclusion

General satisfaction among patients has been stable or slightly improved over 15 years. Good communication with physician, respecting autonomy and patient safety should be recognized again to improve patient satisfaction.

Conflict of Interest

There is no conflict of interest in this study.

Acknowledgement

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